

REMARKS

Reconsideration and further prosecution of the above-identified application are respectfully requested in view of the amendments and discussion that follows. Claims 1-14 are pending in the prior application.

Rejections Under 35 U.S.C. §103(a)

Claims 1, 2 and 13 have been rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 6,730,025 to Platt in view of U.S. Pat. No. 5,782,773 to Kou et al., U.S. Pat. No. 6,754,355 to Stetzler et al. and U.S. Pat. No. 5,889,855 to Brown. Applicant respectfully traverses these rejections.

In response, claim 1 has been further limited to the context wherein "central processing unit provides a relatively low frequency reference clock frequency to the acquisition element through the connector cable." Support for this additional limitation may be found within paragraph [0027] of the specification.

Claim 1 has also been further limited to the context "wherein said acquisition element further comprising a digital signal processor and an analog-to-digital converter that samples the twelve lead electrocardiogram signal under control of the digital signal processor." The analog-to-digital converter 82 is shown in FIG. 2 of the specification. Sampling of the electrocardiogram signal under control of the digital signal processor 74 is provided within paragraph [0015] of the specification.

Claim 1 has also been further limited to the context "wherein said digital signal processor further comprises a

relatively high frequency internal clock that is synchronized to the relatively low frequency reference frequency of the central processing unit via a phase-locked loop." Support for synchronization of the high frequency internal clock of the DSP 74 with the reference clock frequency using a phase-locked loop 72 is provided within paragraph [0027] of the specification.

Claim 1 is now clearly differentiated from the combination of Platt, Kou et al., Stetzler et al. and Brown. On a first level, Platt (FIGs. 1-2) is the only reference that has a separate acquisition unit 1. However, under Platt, it is software within the By video game player 2 that controls sampling. In this regard, Platt explicitly states that "At each timer interrupt the software enables the ADC via -CS line, it then sets the serial port to load one byte of data from the ADC" (Platt, col. 6, lines 22-23; FIG. 2). As such, Platt fails to provide any teaching or suggestion of an ADC controlled by a digital signal processor within the acquisition module. Moreover, software control of sampling would appear to be an essential element of Platt in that "An application specific program . . . stored in the preprogrammed cartridge 4 . . . controls ECG data retrieval" (Platt, col. 4, lines 29-32).

Kou et al., Stetzler et al. and Brown also fail to provide any teaching of a digital signal processor within an acquisition unit that controls an ACD. As such, the combination of Platt, Kou et al., Stetzler et al. and Brown fails to provide any teaching or suggest of this claim element.

The combination also fails to provide any teaching or suggestion of a phase-locked loop (PLL) within an acquisition unit that synchronizes the digital signal

processor to the controller of the hand-held processing unit. Moreover, the presence of the PLL offers a functionality not available through Platt, Kou et al., Stetzler et al. or Brown. For example, the PLL allows the digital signal processor to process sampled signals at a significantly faster rate than without a PLL. This is demonstrated by the fact that Platt only samples signals at 200 Hz (Platt: col. 5, line 54; col. 6, lines 21-22). In contrast, the claimed invention "may simultaneously collect samples at 4,000 samples per second" (specification, par. [0015]).

For any of the above reasons, the combination of Platt, Kou et al., Stetzler et al. and Brown fails to teach or suggest each and every limitation of claims 1, 2 and 13. Since the combination fails to teach each and every claim limitation, the rejections are now improper and should be withdrawn.

Claims 3 and 4 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Kuo et al., Steltzer et al., Brown and U.S. Pat. No. 5,876,351 to Rhode. However, Rhode suffers from the same deficiency as Platt, Kuo et al., Steltzer et al. and Brown. More specifically, Rhode also fails to provide a digital signal processor in an acquisition unit that controls sampling or a PLL that controls a clock rate of sampling in the acquisition unit. Since the combination does not render the claims prima facie obvious, the rejections are improper and should be withdrawn.

Claim 5 has been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Kuo et al., Steltzer et

al., Brown and U.S. Pat. No. 6,292,692 to Skelton et al. However, the combination of Platt, Kuo et al., Steltzer et al., Brown and Skelton et al. suffers from the same deficiency as Platt and Kuo et al., Steltzer et al. and Brown. More specifically, Skelton et al. also fails to provide a digital signal processor in an acquisition unit that controls sampling or a PLL that controls a clock rate of sampling in the acquisition unit. Since the combination does not render the claims prima facie obvious, the rejections are improper and should be withdrawn.

Claims 6-11 and 14 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Kuo et al., Steltzer et al., Brown and U.S. Pat. No. 6,141,584 to Rockwell et al. However, the combination of Platt, Kuo et al., Steltzer et al., Brown and Rockwell et al. suffers from the same deficiency as Platt and Kuo et al., Steltzer et al. and Brown. More specifically, Rockwell et al. also fails to provide a digital signal processor in an acquisition unit that controls sampling or a PLL that controls a clock rate of sampling in the acquisition unit. Since the combination does not render the claims prima facie obvious, the rejections are improper and should be withdrawn.

Claim 12 has been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Kou et al. Steltzer et al., Brown and U.S. Pat. No. 5,873,838 to Mogi. However, the combination of Platt, Kuo et al., Steltzer et al., Brown and Mogi suffers from the same deficiency as Platt and Kuo et al., Steltzer et al. and Brown. More specifically, Mogi also fails to provide a digital signal

processor in an acquisition unit that controls sampling or a PLL that controls a clock rate of sampling in the acquisition unit. Since the combination does not render the claims prima facie obvious, the rejections are improper and should be withdrawn.

Claims 1, 2 and 13 have been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of U.S. Pat. No. 6,773,396 to Flach et al., Kou et al., Steltzer et al. and Brown. However, the combination of Platt, Flach et al., Kuo et al., Steltzer et al. and Brown. suffers from the same deficiency as Platt, Kou et al., Stetzler et al. and Brown. More specifically, Flach et al. also fails to provide a digital signal processor in an acquisition unit that controls sampling or a PLL that controls a clock rate of sampling in the acquisition unit. Since the combination does not render the claims prima facie obvious, the rejections are improper and should be withdrawn.

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Claim 12 has been rejected under 35 U.S.C. §103(a) as being obvious over Platt in view of Flach et al., Kuo et al., Steltzer et al., Brown and Mogi. However, the combination of Platt, Flach et al., Kuo et al., Steltzer et al., Brown and Mogi suffers from the same deficiency as

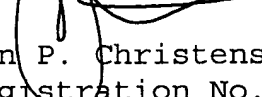
Platt, Flach et al., Kuo et al., Steltzer et al. and Brown. More specifically, Mogi also fails to provide a digital signal processor in an acquisition unit that controls sampling or a PLL that controls a clock rate of sampling in the acquisition unit. Since the combination does not render the claims prima facie obvious, the rejections are improper and should be withdrawn.

Closing Remarks

Allowance of claims 1-14, as now presented, is believed to be in order and such action is earnestly solicited. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he is respectfully requested to telephone applicant's undersigned attorney.

The Commissioner is hereby authorized to charge any additional fee which may be required for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Should no proper amount be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 23-0920. A duplicate copy of this sheet(s) is enclosed.

Respectfully submitted,
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